

Claims

Claims 1-19 (Canceled)

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20. (Previously presented) A method for compensating for drift in fingerprint spectra due to differences in environmental factors that affect the metabolic state of microorganisms, comprising:

culturing under a first set of environmental factors a first microorganism and a second microorganism that is presumably metabolically similar to the first microorganism;

measuring a fingerprint spectrum of the first microorganism cultured under the first set of environmental factors and a fingerprint spectrum of the second microorganism cultured under the first set of environmental factors;

obtaining a fingerprint spectrum of the second microorganism cultured under a second set of environmental factors that differ from the first set of environmental factors and affect the metabolic state of the first and second microorganisms;

deriving a relationship between the fingerprint spectrum of the second microorganism cultured under the first set of environmental factors and the fingerprint spectrum of the second microorganism cultured under the second set of environmental factors; and,

applying the relationship derived for the second microorganism to transform the fingerprint spectrum of the first microorganism cultured under the first set of environmental factors to an expected fingerprint spectrum for the first microorganism under the second set of environmental factors that is compensated for drift due to the differences between the first and second sets of environmental factors that affect the metabolic state of the first microorganism.

21. (Currently amended) The method of claim 20, wherein culturing under a first set of environmental factors comprises culturing on a test growth medium and culturing under the second set of environmental factors comprises culturing on a library growth medium that differs from the test growth medium.

22. (Currently amended) The method of claim 20, wherein the fingerprint spectra are selected from the group consisting of mass spectra, electron impact mass spectra, pyrolysis mass